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NOTICE OF ALLOWANCE AND FEE(S) DUE

8791 7590 11/10/2008 BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNNYVAT F. CA 94085-4040 EXAMINER
DINH, MINH
ART UNIT PAPER NUMBER
2432

DATE MAILED: 11/10/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/691,170	10/22/2003	Brant L. Candelore	80398P558D	6531			
ITTLE OF INVENTION: MULTI-PROCESS DESCRAMBLER							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/10/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This appropriate. All further condicated unless corrected maintenance fee notification	form should be used for correspondence includired d below or directed oth ions.	or trang the	nsmitting the ISSU Patent, advance on in Block 1, by (a						hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDE	NCE ADDRESS (Note: Use Bi	ock I for	any change of address)		Note Fee(pape	: A certificate of s) Transmittal. Thi rs. Each additional its own certificate	mailings certil	can only be used fo icate cannot be used f , such as an assignme ling or transmission.	or domestic mailings of the for any other accompanying nt or formal drawing, must
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									(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/691,170	10/22/2003			Brant L. Candelor	re			80398P558D	6531
TITLE OF INVENTION:									
APPLN. TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE I	OUE	PREV. PAID ISSUE	SFEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300		\$0		\$1810	02/10/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	3				
DINH, N	MINH		2432	380-284000					
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN	ondence address (or Cha /122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA sss an assignee is ident in 37 CFR 3.11. Comp	nge of 'Indiced. Us	Correspondence ation form e of a Customer		ap to rnativ single or attor II be or typ he pa g an :	3 registered paten ely, e firm (having as a gent) and the name neys or agents. If o printed. e)	memb es of u no nan	er a 2p to be is 3	ocument has been filed for
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4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				A check is enclose Payment by credi	sed. it care	i. Form PTO-2038	is atta	required fee(s), any de	
	SMALL ENTITY state	s. See	37 CFR 1.27.	☐ b. Applicant is no	o long	ger claiming SMAI	L EN	FITY status. See 37 Cl	FR 1.27(g)(2).
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if req ecords of the United Sta	iired) tes Pat	will not be accepted ent and Trademark	from anyone other to Office.	han th	ne applicant; a regi	stered.	attorney or agent; or th	ne assignee or other party in
Authorized Signature						Date			
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1279 OAKMEAD		ART UNIT	PAPER NUMBER			
SUNNYVALE, CA	A 94085-4040	2432				

DATE MAILED: 11/10/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 727 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 727 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/691,170 CANDELORE, BRANT L. Notice of Allowability Examiner Art Unit MINH DINH 2432 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the Examiner's amendment authorized on 11/04/2008. The allowed claim(s) is/are 1-8,23-25, 27 and 32-35. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). Examiner's Amendment/Comment Paper No./Mail Date 11/04/08 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

/Gilberto Barron Jr/

Supervisory Patent Examiner, Art Unit 2432

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EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William W. Schaal on 11/04/08.

The application has been amended as follows:

 (currently amended) A descrambler integrated circuit (IC) adapted to receive scrambled digital content, a message and an encrypted descrambling key, comprising:

a local memory to store a unique key;

a first process block to deerypt encrypt the [[a]] message using the unique key to produce a key, the key being formed from a mating key generator being the [[a]] message that comprises an identifier of a manufacturer of a digital device including the descrambler IC, a mating key sequence number, and an identifier of a supplier of the scrambled digital content, the supplier being one of a cable provider, a satellite-based provider, a terrestrial-based provider, and an Internet service provider;

a second process block using the key to decrypt the encrypted descrambling key and to recover a descrambling key; and

a descrambler using the descrambling key to descramble the scrambled digital content and to produce digital content in a clear format. Application/Control Number: 10/691,170

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- 6. (currently amended) The descrambler IC of claim 5, wherein the mating key generator further comprises [[(i)]] an identifier that identifies a conditional access (CA) system provider over which the scrambled digital content and the mating key generator is transmitted; and (ii) a mating key sequence number.
- (currently amended) A descrambler integrated circuit (IC) adapted to receive scrambled digital content and to descramble the scrambled digital content, comprising:
- a first process block to encrypt a message using a unique, one-time programmable key to produce a first key, the message includes a mating key generator being a message that comprises (i) an identifier of at least one of (i) a manufacturer of a digital device employed with the descrambler IC, (ii) a service provider identifier, and (iii) a conditional access (CA) provider identifier (ii) a mating key sequence number, and (iii) an identifier of a supplier of the scrambled digital content, the supplier being one of a cable provider, a satellite-based provider, a terrestrial-based provider, and an Internet service provider;
- a second process block to receive an encrypted second key and, using the first key, to decrypt the encrypted second key in order to recover the second key in a non-encrypted format, the encrypted second key; and
- a descrambler using the second key in the non-encrypted format to descramble the scrambled digital content and to produce digital content in a clear format.
- 32. (currently amended) A descrambler integrated circuit (IC) adapted to receive scrambled digital content, a message and an encrypted descrambling key, comprising:
 - a local memory to store a unique key;

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a first process block controlled by a non-CPU based state machine to deerypt encrypt a message using the unique key to produce a key, the message [[is]] being a mating key generator that comprises (i) a mating key sequence number, (ii) an identifier of one or more of (i) a manufacturer of a digital device employed with the descrambler IC, (ii) a service provider, and (iii) a conditional access (CA) provider identifier and (iii) an identifier of a supplier of the scrambled digital content, the supplier being one of a cable provider, a satellite-based provider, a terrestrial-based provider, and an Internet service provider;

a second process block controlled by a non-CPU state machine using the key to decrypt the encrypted descrambling key and to recover a descrambling key; and

a descrambler using the descrambling key to descramble the scrambled digital content and to produce digital content in a clear format.

2. The following is an examiner's statement of reasons for allowance. The present invention is directed to a descrambler integrated circuit (IC) for producing a key, using the key to decrypt an encrypted descrambling key, and using the decrypted key to descramble scrambled digital content. More specifically, independent claim 1 identifies the uniquely distinct features: a first process block to encrypt the message using the unique key to produce a key, the key being formed from a mating key generator being the message that comprises an identifier of a manufacturer of a digital device including the descrambler IC, a mating key sequence number, and an identifier of a supplier of the scrambled digital content, the supplier being one of a cable provider, a satellite-based provider, a terrestrial-based provider, and an Internet service provider. The

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closest prior art includes: Wasilewski et al. (6,157,719) and Kocher et al. (6,289,455) disclose a descrambler integrated circuit for producing keys for descrambling scrambled digital content; Sugahara et al. (7,254,234) discloses a method for generating a key using multiple encryption-key base information pieces including (i) identification of an apparatus/device maker, and (ii) identification of a content provider. However, the prior art, taken either singly or in combination, fails to anticipate or fairly suggest the limitations of applicant's independent claim, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being novel and nonobvious over prior art. Independent claims 23 and 32 recite similar limitations and, therefore, allowable for the same reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH DINH whose telephone number is (571)272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. D./ Examiner, Art Unit 2432

11/05/08

/Gilberto Barron Jr/ Supervisory Patent Examiner, Art Unit 2432